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POPULATION POLICY

Surveys Show Persistence of Teenage Marriage and Childbearing in Indonesia and Nepal

omen in many Asian countries are waiting later and later to marry and have children. Yet in parts of South and Southeast Asia, many women still marry and have their first child while still in their teens. This is a serious health concern. Studies all over the world have shown that health and mortality risks are significantly higher when women this young give birth.

Early marriage and childbearing are common in rural areas of Indonesia in spite of rapid economic growth. And here, as elsewhere, early childbearing is associated with high risk. According to the 1997 Indonesia Demographic and Health Survey, infant mortality is 34 percent higher for mothers in their teens than for mothers in their teens than for mothers in their 20s. Partly due to the prevalence of early childbearing, Indonesia has higher overall levels of infant mortality than many other countries with similar levels of economic development.

In Nepal, economic and social development are still at an early stage. Fertility remains high, early marriage and childbearing are widespread, and infant mortality is also high. The 1996 Nepal Family Health Survey shows that infant mortality is 50 percent higher for mothers in their teens than for mothers in their 20s.

This issue of *Asia-Pacific Popula*tion & *Policy* looks at factors associated with early marriage and childbearing in these two countries. Results are based on the Indonesian Baseline Survey of Young Adult Reproductive Welfare, conducted in 1998, and the Nepal Adolescent and Young Adult Survey (NAYA), conducted in 2000.

BACKGROUND

Recent surveys associated with the Asian Young Adult Reproductive Risk (AYARR) project provide information on many types of risk-taking behavior. The project compares results from large-scale, national-level surveys of adolescents and young adults in Indonesia, Nepal, Thailand, the Philippines, Hong Kong, and Taiwan. The AYARR project is coordinated by the East-West Center with financial support from the United States Agency for International Development (USAID).

In Indonesia, the Baseline Survey of Young Adult Reproductive Welfare interviewed a total of 3,978 women and 4,106 men age 15–24 in West, Central, and East Java and in Sumatra's Lampung Province. The University of Indonesia's Demographic Institute (Lembaga Demografi) conducted the survey under the National Family Planning Coordinating Board (BKKBN). The East-West Center gave technical support, and Focus on Young Adults/Pathfinder International, USAID, and the World Bank provided funding. Because the

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survey was designed to provide baseline information for BKKBN/World Bank projects in rural, poorly developed districts, metropolitan Jakarta and three provincial capitals (Bandung, Semarang, and Surabaya) were excluded.

The Nepal Adolescent and Young Adult (NAYA) Survey interviewed 1,445 women and 1,379 men in five urban areas and 2,730 women and 2,423 men in eight rural districts across the country. Respondents ranged in age from 14 to 22. Family Health International conducted the survey with funding from USAID. The East-West Center helped with questionnaire design, and Valley Research Group conducted the fieldwork.

MARRIAGE AND CHILDBEARING

Survey results show that early marriage is common in both countries. More than half (56 percent) of rural women in Nepal are married by age 18, and nearly three-quarters (71 percent) are married by age 20 (Figure 1). More than half (59 percent) of rural women in Indonesia are also married by age 20. Women tend to marry at younger ages in Nepal than in Indonesia, and rural women tend to marry at younger ages than urban women.

Although child marriage appears to be declining, marriage before age 16 is not uncommon in rural areas. Among rural women, an estimated 25 percent in Nepal and 15 percent in Indonesia marry before age 16, which is the legal minimum age at marriage for women in both countries.

Childbearing before age 20 is very common in rural Indonesia and in both urban and rural Nepal (Figure 2). In both countries, four out of 10 rural women have a child by age 20, and more than one in 10 has a child by age 18.

In both Indonesia and Nepal, childbearing begins soon after marriage, typ-

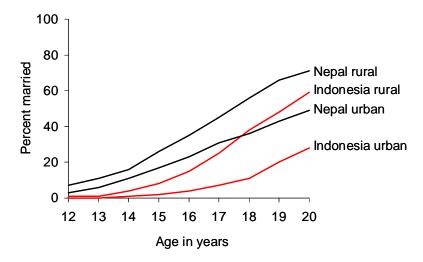


Figure 1 Cumulative proportions of women who marry by ages 12–20, Nepal and Indonesia

Note: Proportions are estimated by the life-table method.

ically within two years. The exception to this pattern is women who marry when they are very young but do not live with their husbands until some time after marriage. Yet even these women generally have children long before they reach age 20.

EDUCATION AND WORK

Schooling and work opportunities give young women alternatives to early marriage and childbearing. The two surveys suggest that such opportunities are limited, however, particularly in rural areas and particularly in Nepal.

The difference in women's educational attainment in rural and urban areas is especially striking. Well over half of rural women age 18–22 have primary schooling only or no education at all—60 percent in Nepal and 64 percent in Indonesia. By contrast, three-quarters of young women in urban areas have junior high education or higher—77 percent in Nepal and 75 percent in Indonesia. Educational levels for urban women are most likely even higher in Indonesia because the survey

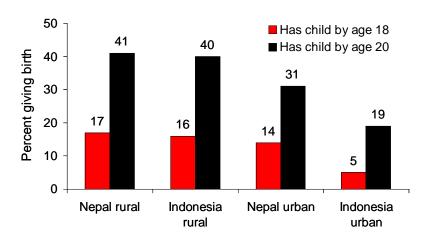


Figure 2 Cumulative proportions of women who have their first child by ages 18 and 20, Nepal and Indonesia

Note: Proportions are estimated by the life-table method.

did not include Jakarta or three of the provincial capitals, where educational attainment is likely to be high.

The major difference between the two countries is the much wider attainment of at least some primary education in Indonesia. Very few young women in Indonesia have no education at all—only 2 percent in rural areas and 1 percent in urban areas. By contrast, in the rural areas of Nepal, 45 percent of young women have no education. Even in Nepal's urban areas, 15 percent of young women have no education.

The surveys also show low levels of employment among young women. Defining employment widely as any work done for pay, fewer than one in 10 single women under age 20 are employed in Nepal—8 percent in urban areas and 6 percent in rural areas. Even in Indonesia with a higher level of economic development, fewer than one in four single women under 20 are employed—21 percent in urban areas and 18 percent in rural areas.

FACTORS ASSOCIATED WITH EARLY CHILDBEARING

Which women are at particularly high risk of becoming mothers while still in their teens? We use multivariate analysis to estimate the net effects of selected socioeconomic and demographic factors on the probability that a woman will give birth before age 20. We estimate these effects using proportional hazard models that include woman's age and education, woman's mother's and father's education, rural/urban residence, and district. For Nepal only, the models also include ecological region and childhood exposure to radio and television.

In both Indonesia and Nepal, woman's education has the largest impact of any of these variables on the probability of giving birth before age 20 (Figure

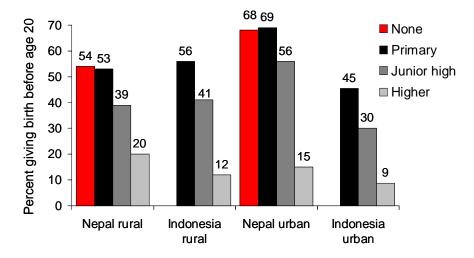


Figure 3 Adjusted proportions of women giving birth before age 20 by woman's education, Nepal and Indonesia

Note: Estimated percentages are based on separate hazard models for urban and rural areas with control variables for woman's age, woman's mother's and father's education, district, and—for Nepal only—ecological region and childhood exposure to radio and television. The control variables are held constant by setting them to their mean values in the underlying hazard models.

3). The effects of woman's education are statistically significant even after controlling for the effects of all the other variables.

Differences in early childbearing between women in urban and rural areas are largely explained by the fact that urban women tend to be more educated than rural women. In fact, the very small number of women in urban Nepal with little or no education have the highest rates of early childbearing of any group.

In each of the two countries, one additional factor has a significant effect on the probability of early child-bearing. In Indonesia, a woman whose parents are educated is less likely than other women to give birth before age 20, even after controlling for other variables including the woman's own educational level. The effect of a woman's mother's education is particularly strong (Figure 4).

In Nepal, ecological region has a statistically significant effect on early childbearing, most likely because of differences in cultural traditions between Nepal's ecological zones. Young wom-

en are much more likely to have at least one child by age 20 in the Terai—the ecological region bordering India that is most strongly influenced by north Indian culture—than in the hill region, where Indian culture is not as strong (Figure 5). These differences are statistically significant even after controlling for other demographic and socioeconomic factors.

POLICY IMPLICATIONS

A large proportion of women in Indonesia and Nepal marry and begin having children while still in their teens. Yet recent demographic and health surveys in both countries show high infant mortality rates for births to teenage mothers.

There are several reasons why health risks are greater when women give birth before age 20. Apart from biological factors, early marriage and child-birth—at least in Indonesia and Nepal—generally mean the early termination of a woman's formal education. Virtually no women attend school after marriage.

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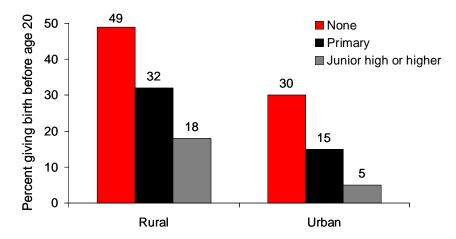


Figure 4 Adjusted proportions giving birth before age 20 by woman's mother's education, Indonesia

Note: Estimated percentages are based on separate hazard models for urban and rural areas with control variables for woman's age and education, woman's father's education, and district. The control variables are held constant by setting them to their mean values in the underlying hazard models.

In addition, women who marry at very young ages have limited access to mass media and other sources of information. As a result, these women have limited knowledge of reproductive health. They are also less likely to use maternal and child-health services than women who wait until a later age to marry and give birth.

Experience in many countries suggests that it is difficult for policymak-

ers to influence age at marriage and childbearing directly. In both Nepal and Indonesia, the legal age at marriage for women is 16, but one in four rural women in Nepal and one in seven in Indonesia marry below this age.

What types of policies and program might be effective? Survey results show that very few variables have a significant effect on the timing of marriage and childbearing after controlling for

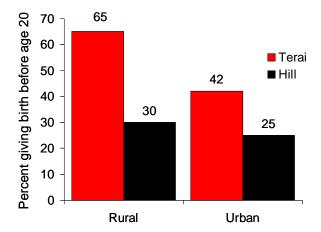


Figure 5 Adjusted proportions giving birth before age 20 by ecological region, Nepal

Note: Estimated percentages are based on separate hazard models for urban and rural areas with control variables for woman's age and education, woman's mother's and father's education, district, and childhood exposure to radio and television. The control variables are held constant by setting them to their mean values in the underlying hazard models.

the effects of other demographic and socioeconomic characteristics. Women's education is the only variable consistently associated with an increase in the age of marriage and childbearing in both countries.

Although the effects of primary education are small, early marriage and childbearing drop steeply among women with junior high or higher education. Clearly, providing all women with education at this level is a long-term goal, but the results reported here show that one benefit of such a strategy would be to reduce the number of women marrying and giving birth while still in their teens.

Information programs that emphasize the health advantages of delayed marriage and childbirth could be beneficial in both countries. The special challenge is to reach young women with low levels of education and little access to mass media. Community-level programs might usefully target the parents, husbands, and parents-in-law of such young women as well as the women themselves.

School curricula might also place more emphasis on reproductive health topics, including the benefits of postponing marriage and childbearing. Reproductive health education needs to be introduced in the last years of primary school because—for now—few women go on to higher education, particularly in rural areas.

Finally, service-delivery programs could place greater emphasis on the needs of young married women. In Nepal, where family planning services have traditionally emphasized sterilization, programs that offer temporary contraceptive methods could help young women delay and space births. For women who still go on to give birth in their teens, targeted maternal and child health programs could help address the special risks to mothers and their children.